

## Answering common questions about high blood pressure

February 7 2023, by Kathy Katella



Credit: CC0 Public Domain

If you do just one thing to improve your health this year, it could be to gain control over your blood pressure. Cases of high blood pressure, or hypertension—a silent, but dangerous condition—have skyrocketed over the past decade. It's estimated that almost half of all adults—some 116 million people—in the United States have hypertension. If you eat a lot



of processed foods, are overweight or obese, are chronically stressed, or have a family history of high blood pressure, you are considered at risk for the condition.

The good news is that most of these risk factors can be addressed. While you can't change your family history, you can get help adjusting your diet, losing weight, and managing stress. And there are effective medications for <a href="high-blood pressure">high blood pressure</a>.

Yale Medicine nephrologist Jeffrey Turner, MD, and cardiologist Antonio Giaimo, MD, answered common questions about the latest information and approaches for controlling your blood pressure.

### 1. What is hypertension?

Your heart pumps five to seven liters of blood per minute. When you're healthy, that blood flows freely through your veins and arteries to the rest of the body. Your blood pressure is the measurement of the force—or pressure—of your blood pushing against the walls of your arteries as it moves from your heart throughout your body. It rises and falls throughout the day, depending on your activities. If your blood pressure is consistently too high, it's called hypertension.

### 2. What do my blood pressure numbers mean?

Blood pressure is measured using two numbers:

- Systolic is the pressure in your arteries when your heart beats (the highest pressure).
- Diastolic is the pressure in your arteries when your heart rests between beats (the lowest pressure).



A normal blood pressure reading would be written as 120 systolic over 80 diastolic, or "120/80 mmHg." Numbers that are consistently higher than that suggest hypertension and are a reason to make an appointment with a primary care provider.

### 3. How do I know if I have high blood pressure?

Because hypertension involves consistently high blood pressure readings over time, one or two readings alone might not be helpful. The best way to know if you have it is to monitor your blood pressure over time, either at annual physicals in the doctor's office or at home, using your own blood pressure cuff.

It's important to note that you could have hypertension even if you feel fine because it generally doesn't cause symptoms. High blood pressure tends to develop gradually over a period of years, so you shouldn't be misled by the lack of symptoms, says Dr. Turner.

"Sometimes there's an assumption that if you feel well, you're generally healthy. But you can feel very well for a long time and not know you have significant high blood pressure that's damaging your body," he says.

### 4. Why is hypertension dangerous?

The condition forces the heart to work harder, which can lead to serious problems that include chest pain, heart attack, stroke, peripheral artery disease, and heart failure. There is also a subtype of dementia called vascular dementia, which is much more prevalent in patients with high blood pressure. "The thought is that high blood pressure contributes to blockages in small blood vessels of the brain, injuring it. That, over time, can lead to dementia," Dr. Giaimo says.



### 5. Why is high blood pressure on the rise?

The culprit could be salty diets. Americans have a salt problem, Dr. Giaimo says. And that doesn't necessarily mean table salt. "The challenge in the U.S., in particular, is that many of the processed foods we buy have tons of salt in them," he says. This excess sodium leads to excess fluid and volume in the blood vessels, which causes blood pressure to rise. Beyond that, a high-sodium diet combined with a sedentary lifestyle is likely also contributing to the obesity epidemic, and the extra weight can also raise blood pressure, he adds.

### 6. Should I limit my salt intake?

The American Heart Association recommends limiting sodium to 2,300 milligrams (mg) daily and says most adults should move toward an ideal limit of 1,500 mg per day. (Some canned soups contain as much as 800 mg or more of sodium per cup.)

### 7. Can stress cause high blood pressure?

It's difficult to pin down the exact relationship between stress and hypertension, Dr. Giaimo says. "But we know when we look at population studies that include large groups of patients that certain stressors worsen <u>cardiovascular disease</u> as a whole," he says. "We're talking about things like financial burdens and living in communities where people feel marginalized." He adds that loneliness is also a contributor, with studies showing that it can lead to poor adherence to treatment and poor follow-up to care.

### 8. How do I know if I am at risk for hypertension?

While anyone can develop high blood pressure, those with a family



history or genetic predisposition toward the condition are at higher risk. According to the Centers for Disease Control and Prevention (CDC), Black Americans develop high blood pressure more often and earlier in life than whites, Hispanics, and other groups. Risk also increases with age—three out of every four Americans age 75 and older have high blood pressure.

### 9. Can I have high blood pressure if I'm young?

Yes. There are more young people with high blood pressure today than there were 20 or 30 years ago, Dr. Giaimo says. That includes children and teenagers, a group that also has shown an uptick in overweight, obesity, and type 2 diabetes—all of which can contribute, he says.

Many children carry their health problems into young adulthood, Dr. Giaimo says. "The challenge with that group—ages 20 to 35—is that they don't often seek medical care because they feel healthy. But we could help those patients eat healthier diets and live healthier lifestyles early in life. That would certainly bring down the number of people with high blood pressure or prolong the period of time before they develop it."

# 10. Why is my blood pressure always higher in the doctor's office? Should I check my blood pressure at home?

In the last few years, home blood pressure monitoring has been one of the most important and successful strategies for controlling blood pressure. It's especially useful for people who have experienced "white coat hypertension," defined as anxiety in a medical office leading to abnormally high blood pressure that is otherwise normal when measured outside a medical setting.



"There are two other important groups that don't get as much attention," Dr. Giaimo says. "One is patients whose blood pressure is high at home and a little bit higher in the office—they have a 'white coat' component to their high blood pressure. But, then, there is a smaller but equally important group of people with normal blood pressure in the office and elevated blood pressure at home. We call the latter 'masked hypertension." These are situations where home monitoring can provide better clarity."

## 11. What lifestyle changes can prevent or bring down high blood pressure?

Losing weight, quitting smoking, cutting back on drinking alcohol, and developing a quality sleep routine can help prevent or lower blood pressure. Research has shown the Dietary Approaches to Stop Hypertension (DASH) diet is effective; its emphasis is on foods that are rich in calcium, magnesium, and potassium, as well as limits on saturated fats, sodium, and sugars. These strategies also benefit those who are treating hypertension with medication. "With patients who only take medicine but don't make the <u>lifestyle changes</u>, the medicine doesn't work as well," Dr. Giaimo says.

### 12. Can exercise help with blood pressure control?

Yes, but it should be cardiovascular exercise that gets your heart rate up and makes you sweat, Dr. Giaimo says. The Physical Activity Guidelines for Americans recommends that adults get at least two hours and 30 minutes of physical activity each week, and children get an hour of activity a day. "For many people, especially older adults, taking a walk is a great start," Dr. Giaimo says. "Over time, that walk can get a little faster and include some hills, depending on their mobility."



## 13. What if I do everything right and still have high blood pressure? Are there effective medications?

- Experts have been studying blood pressure medications for many years. There are now many effective ones with good evidence showing that they reduce blood pressure and prevent cardiovascular disease, Dr. Turner says. The three categories of the most commonly used blood pressure medicines are:
- Diuretics, the most commonly prescribed hypertension medication, reduce salt and water in the body, including the amount of fluid in the blood vessels, which lowers blood pressure.
- Calcium channel blockers cause the blood vessels to relax and dilate, which lowers blood pressure.
- Angiotensin-converting enzyme (ACE) inhibitors and angiotensin receptor blockers (ARB) block a common hormone pathway in the body that is maladaptive, also lowering blood pressure.

Which kind should you take? One strategy is to choose medications that both lower blood pressure and help treat other issues, Dr. Turner says. For example, if a patient has kidney disease and high blood pressure, certain blood pressure medicines have a dual effect of treating and preventing both conditions.

### 14. What are the side effects related to blood pressure medications?

Most people can tolerate blood pressure medications well, although some experience mild side effects that might include headache, dizziness, stomach problems, and swelling in the feet and legs.

Experts have found that prescribing multiple blood pressure drugs at



lower doses is often more effective and causes fewer side effects than offering one drug at a higher dose. "Each class of treatments includes dozens of medications, so we focus on finding the right mix for each patient," Dr. Turner says. There are now almost 20 different combination pills available for blood pressure treatment.

## 15. What if I need blood pressure medication, but I don't like to take pills?

Dr. Turner tells patients that if they have any issues at all with a medication, there is a good chance that it can be changed or adjusted. Some patients do better when they have fewer pills to take—as in a oncea-day drug compared to one that must be taken three times a day, he adds. One convenient non-pill option is a transdermal (skin patch) medicine that lowers your heart rate and relaxes the blood vessel; it needs to be changed only once a week.

## 16. Should I consult a cardiologist about my high blood pressure?

Not necessarily. Primary care providers can treat blood pressure. But there are subsets of patients whose hypertension is difficult to control or who have additional cardiovascular disease. There are also those with changes to their heart or kidneys as a result of high blood pressure. Those patients should see a cardiologist or, if appropriate, a nephrologist, Dr. Giaimo says. "Some cardiologists and nephrologists specialize in the management of hypertension, so we're a resource for patients who, despite making lifestyle changes and being on three or four medicines, still have high blood pressure," he says.

### 17. What if I'm still finding it difficult to get



### motivated to control my blood pressure?

Taking steps to control <u>blood pressure</u> often comes down to individual choice, Dr. Turner says. He asks <u>patients</u> to be honest about their willingness to make changes they might find difficult. "The more forthcoming someone is about what they're willing to do and not do, the easier it becomes."

At the same time, it takes a certain level of commitment to live a healthy life, he says. "It's not helpful to give hypertension your attention for a month or two, then let it fall away," he says. "This is a lifelong marathon that you're embarking on. You'll likely be paying attention to this in one form or another, whether it's with medication or lifestyle, for years to come. But it can help ensure that you will be healthier down the road."

#### Provided by Yale University

Citation: Answering common questions about high blood pressure (2023, February 7) retrieved 27 April 2024 from <a href="https://medicalxpress.com/news/2023-02-common-high-blood-pressure.html">https://medicalxpress.com/news/2023-02-common-high-blood-pressure.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.